

The 50 MHz DX Bulletin

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The 50 MHz DX Bulletin was founded by Harry Schools K3HS. It is dedicated to the understanding and utilization of long distance propagation in the 6-meter Amateur band. The current editor and publisher is Victor Frank, K6FV. Subscription rates are \$24 U.S. first class mail, \$27 Canada/Mexico airmail, and \$30 by airmail elsewhere for 12 issues. Payments may be made to k6fv through PayPal. Circulation matters and DX reports should be sent to Victor R. Frank, K6FV, 12450 Skyline Blvd., Woodside, CA 94062-4554 USA. My Internet address is victor.frank@sri.com. My web site is <http://www.qsl.net/k6fv>. The bulletin may be freely quoted, provided that credit is given.

DX Operations

Most of the listings in this column came from SM7AED's notebook.

East Malaysia, 9M6/JA3EGZ & 9M6/JA3DFM: plan 80-6m operation from Kota Kinabalu between July 7 and 10.

Sri Lanka, 4S7CCG: Bob, ZL1RS, will be on 6m with a 4 el beam and IC706MK2 until November 2006.

Chagos Is., VQ9JK: is apparently QRV on 50.110 from MI62, according to a self-post on the DX cluster.

Andaman Islands, VU4: A group of ten radio amateurs plan to operate 3-4 stations on 160-6m between April 18 and May 25. See <http://groups.yahoo.com/group/VU-CHAT>.

Mozambique, C9: Frosty, K5LBU, and Tom, WW5L, plan to operate HF, 6m, 2m, & 70cm EME from Bilene from June 29-July 13. They have room for more team members. If you're interested, contact K5LBU at frosty1@pdq.net. See their web page at <http://www.tdxs.net/C9.html> for details.

Iraq, YI9RTG: is currently active on 6m and he is waiting for the Es season.

Italy, Lampedusa Is., IG9: A group of Italian radio amateurs plans to be active on all bands from 160m-12 cm from two lighthouses on AG-001 from May 13-19.

Albania, ZA/I8YGZ: Pino plans be active on 160, 6, and 2m from three lighthouses near Vlora, Dur, and Saranda between May 1 and 15.

Albania, ZA/IK0OKY: Emilio, a UN Peace-Keeper in Tirana (JN91wh) until August 2006 will be active evenings from 20Z to 23Z and weekends from 0630Z onwards in FSK441A. He is active on 6m and 2m MS. He says that Tirana is surrounded by mountains, so VHF is very difficult.

Denmark, Romo Island, OZ/OP4A, OZ/OP1A, OZ0ACA: will be active on 80-2m between July 29 and August 4.

Denmark, OZ/DL2VFR: Ric plans to be active on HF-6m from Laeso Is. (JO57)(EU-088) July 23-30 including the RSGB IOTA contest July 29-30.

Svalbard, JW4GHA: Roger, LA4GHA, currently active as T98GHA until the end of November plans to operate 160-2m

from Bear Island (EU-027) between until June 2006.

Jan Mayen, JX9NOA: is QRV, but indicates propagation is poor now. He plans to stay there until October 2006.

Scotland, Shetland Is., GM6VXB/p: Martin's work is taking him to the Shetlands (IO99 & IP90) some time in May where he plans to operate, work permitting, 50, 70, & 144 MHz.

Scotland, St. Kilda Is., GM4SIV: Subject to North Atlantic weather, a group plans to here in grid IO57 from July 1-8.

Scotland, GM, EU-189: Terje, LA3OHA, is organizing a dxpedition to Rockall in IO37, June 16-28. <http://www.dxpedition.org>

Isles of Scilly: A group of Gs plans to return to St. Marys Island, EU-011 (grid IN69UW) and to be QRV from 26/27 July until August 2.

Spain, EH7AB/p: EH7AB is planning to activate a rare grid/locator IM96BW in Almeria in June.

Bermuda, VP9/N0JK: Jon will on 50, 144, and 432 MHz from Bermuda from June 8-12 and will be a serious entry in the 2006 ARRL June VHF QSO Party. Outside of the contest he will focus on working Europe.

USA, W6C: A group of W6s plans 20, 6, & 2m operation from Santa Cruz Island, NA-144, in CM93 on June 9-11.

Canada, VC2X & VF2X: Pete, VE3IKV plans to activate some more rare North American east coast grids during the week of June 30 to July 9. Look for VC2X on the Gaspe peninsula on June 30 and also on the Magdalen Is (NA-038) between July 4-8, and VF2X on PEI (NA-029) July 1-4.

St. Martin, FS/SM7DKF, St. Barthelemy, FJ/SM7DKF: Ron will operate 30-6m SSB and PSK31 from FS May 6-10 and from FJ from May 10-20.

Montserrat, VP2MDD: Graham, M0AEP, plans activity on 80-6m from July 1-14. On 6m he will have 350W plus a 5 el.

British Virgin Islands, VP2V/: K5AND and W7XU and NOLAN are headed to the Loblolly Beach Cottages on the north side of Anegada, a sparsely populated island to the north of better-known Virgin Gorda to operate 6m from June 22-July 3. Hopefully this location will alleviate the problems with power line QRN which plagued earlier expeditions.

Aves Island: Jose Manuel Valdes Rodriguez, YV5LIX, suffered a massive heart attack while on Aves Island with the YX0A team and passed away at 57 years of age. The operation continued under the new call YV0LIX as a tribute to his memory. 6m contacts are listed inside, most to the Caribbean and South America. I tried to filter out the "chatter" reports but some may remain.

St. Kitts, V4/W6JKV: Jimmy plans to operate 6m with good equipment and antenna from June 21 until July 2 this summer.

Haiti, HH4/W3CMP: Chris plans to travel to Haiti June 17-28 for a 6 and perhaps 2m DXpedition. He will operate from St. Louis du Nord on the north coast (FK39).

Samoa, 5W0TR: A group of radio amateurs from US 8th call district is planning to activate 3 stations on 160-6m and 144/432 satellite from Upolu between July 25 and August 10. Favored 6m frequency is 50.115.

Norfolk Is., VI9NI: The Oceania Amateur Radio DX Group Inc (ODXG) is planning to operate on 160-6m from May 25 to June 20 as part of the commemoration of the 150th anniversary of the landing of the HMS Bounty Mutineers.

Beacon News

Chagos Is., VQ9JK: reported by G4IGO as running a keyer on 50.110 on April 24.

Germany, DF0ANN: is a new beacon on 50.083 in JN59PL. It was reported April 16 during a test run with 200 mW.

Ascension Is., ZD8VHF: was reported by ZD8I as being operational again on 50.033.

California, K6FV: 50.069 has changed to NE antenna (NW when open to KL7).

Cycle 24

"It is dangerous to make predictions, especially about the future." Unlike readers of the tabloids, radio amateurs and scientists have long memories -- VRF

A new computer model developed by Mausumi Dikpati and colleagues at the National Center for Atmospheric Research (NCAR) predicts that the next cycle will be up to 50 percent stronger than its predecessor and begin a year later than expected.

The new model, known as the Predictive Flux-Transport Dynamo Model, has simulated the strength of the past eight solar cycles extending back to the early 1900s with 98 percent accuracy. Using the model, researchers predict that Cycle 24 will produce sunspots across an area slightly larger than 2.5% of the visible surface of the Sun. They also expect that the cycle will begin in late 2007 or early 2008--about six to 12 months later than earlier predictions --and reach its peak in 2012.

The basis of the model was observations of sound waves inside the Sun to reveal details about its interior. (These "sound" waves are of very low frequency, about one cycle per minute.) Recent continuous and systematic observations of these waves were made from space with NASA's Solar and Heliospheric Observatory (SOHO).

Researchers attribute the accuracy of the new model to these observations of how plasma circulates between the Sun's equator and its pole and how the resulting currents are affected by the Sun's rotation.

"The birth of a new sunspot", they write, "begins with the death of an old one from a previous cycle. As an old sunspot decays, it leaves a magnetic 'imprint' on the flow of plasma moving between the Sun's equator and its poles. As the plasma approaches the poles, it sinks about 200,000 km down into the Sun's interior and starts its return journey back to the equator.

For comparison, the radius of the sun is about 696,000 km. I was surprised at the 200,000 km depth figure as previous estimates (Menzel, *Our Sun*, 1959) were that only in the outer 10% of the solar radius does convection play a significant part in transport of heat.

The Sun's equator rotates more rapidly than its poles. This differential rotation stretches and twists the moving plasma, concentrating the local magnetic fields into rope-like strands. Eventually these strands are forced to the surface where they observed as sunspot groups.

Readers should note that the sunspots tend to occur at higher latitudes (20-30°) early in the sunspot cycle and at lower latitudes (0-10°) late in the sunspot cycle.

Sunspots were discovered in 1610, however their cyclic behavior was not realized until 1843. Mean annual sunspot numbers have been tabulated since 1749 and some cycles have been real stinkers.

David Hathaway, a NASA astronomer who was not involved in the study, said he is excited about the new model. "It's based on sound physical principals and it finally answers the 150-year old question of what causes the 11-year sunspot cycle." Hathaway's team agrees with Dikpati that Cycle 24 will be stronger than the last one, but disputes the claim that it will occur later than expected. They believe that large cycles usually start early and that Cycle 24 will start sometime later this year or early next year.

I asked Jim Kennedy, K6MIO, for his input, and he responded:

Thanks for the note. I've been down in CE at our southern telescope for the last couple of months and just got back and began catching up on the snail mail.

Yes, this is a very intriguing model!

I joined the National Solar Observatory's Global Oscillation Network Group (GONG) project (<http://gong.nso.edu>; no "www") some twenty years ago as its Project Manager, just as the program was receiving its first main funding from the National Science Foundation (NSF). (Once the network was deployed 11 years later I moved on to the (nighttime) Gemini Observatory in KH6, but I still enjoy my association with the GONG effort.)

Dr. John Leibacher at NSO had fostered a broad collaboration throughout the small international solar physics community, that included most of the key field leaders at that time, including Peter Gilman at NCAR's High Altitude Observatory in Boulder. The GONG program developed and deployed a worldwide network of automated solar telescopes that continue to monitor the Sun 24 hours a day. The telescopes utilized a special instrument that produces an "velocity image" of the surface of the Sun.

A (nearly) continuous "movie" of the sound waves (seismic waves) appearing on the surface of the Sun is stitched together by merging the data from the six observing sites. Sophisticated mathematical analyses of the movie allows one to produce images of the structure, magnetic field, and motions of the material inside the Sun. Although the mathematical details are different, it is rather like doing a CT scan of the interior of a human.

The National Aeronautics and Space Administration (NASA) added to the overall science effort by funding the Stanford University's Solar Oscillation Investigation (SOI) experiment on the SOHO spacecraft (<http://soi.stanford.edu>; also no "www") to do highly complementary observations from space, under the direction of Phil Sherrer. There was and is a strong overlap between the GONG and SOI science communities, with many collaborations past and ongoing.

Among the holy grails of helioseismology have been understanding, and thus predicting, the details of the solar cycle; and being able to image the activity on and within the entire Sun, including the

"farside" or "backside". It appears that both these goals may really be at hand.

Images of the farside Have been available for some time (<http://gong.nso.edu/data/farside/>) and the quality of these images continues to improve.

The work of Mausumi Dikpati and collaborators at NCAR in producing the Predictive Flux-transport Dynamo Model (http://www.space.com/science-astronomy/060306_solar_cycle.html) appears to be a very promising step forward in actually predicting the details of a future solar cycle based on objective measurements of the evolving internal magneto-dynamic structure of the solar interior.

The good news, if true, is that the model predicts that Cycle 24 will be a very good one. And, once the maximum arrives, farside imaging will enable "see activity coming" around the Sun before it gets to a geo-effective position on the front side.

--Jim

April 2006 DX Reports

The following reports of 50 MHz DX propagation are courtesy of JA1VOK, XE2HWB, W5UWB, K6QXY, G4UPS, K6QXY and postings on the Internet. Apologies to any sources I may have inadvertently neglected.

Listings obtained from the OH2AQ reflector include distances in kilometers. These are determined preferentially from the grids in the post, and otherwise from one or both of the prefixes of the calls. Note that the latter results in VERY rough approximations to the distances, especially for large countries and call areas.

The first entry is *mmddhhii*, where *mm* is the month, *dd* is the day of the month, *hh* is the hour UTC, and *ii* is the minutes after the hour. The year is understood to be 2006. Symbols just before the call of the reporting station include: V=Video Carrier, I=Inband video sidebands, F=FM audio, B=beacon, C=CW, D=Telemetry Data, J=Digital, typically JT6M or JT65A for EME, R=RTTY, S=SSB, W=mode not mentioned (or both CW & SSB), H=heard only. BSc = backscatter.

Reports of Africa

CEUTA & MELILLA

04151027 EA9IB 55 1675 50.120 G4PCI
04151031 EA9IB FB PEDRO 1675 50.120 GOCHE

EQUATORIAL GUINEA

04242126 3CVID S8 7841 48.250 V FM5JC

GABON

04242126 TROA 429 50.049 B FM5JC

GUINEA-BISSAU

04031825 J5UCW 55>IM99	50.110	EA5FX
04041831 J5UCW QRV EU	50.110	CT1FFU
04111644 J5CKA >FPK6QA	50.127	WP4NQR

MOROCCO

04151042 CN8MC 549 1675	50.027	G4PCI
04161241 CNBLI IM63>IN73 1119	50.230	EB1IEHO
04211656 CNBLI MS IN73DM>JM63N 893		EB1BMO

ST HELENA IS

04161755 ZD7VC 599 6225	50.006	EA7KW
04161810 ZD7VC 579>IM77 5892	50.006	EB7COL
04161831 ZD7VC 419 5896	50.006	CT1FFU
04172018 ZD7VC 559>IM67 5896	50.007	EA7KW

SOUTH AFRICA

04301634 ZS5LEE -26 EME 7987 50.202 IW5DHN

ZAMBIA

04101718 9J2HK 559 QSB 5574	50.110	SB4FL
04101737 9J2HK CW 6061	50.110	SV1LK
04101844 9J2HK SI-5 >KM17UW	50.110	SV1LK
04191750 9J2HK 559 QSB 6991	50.110	CT1FFU
04191755 9J2HK 559 HIRO >JM49OH 6431		IS0GQX
04190810 9J2HK CW 5965	50.112	IT9KDJ

Reports of Asia (MidEast)

CYPRUS

04301708 5B8AV >JN83FM 1740 50.110 H 9A5ST

LEBANON

04081409 OD5SIX 59+ 6479 50.077 B ZS6CCY

QATAR

04241411 A71EM 599 1996	50.110	SB4FL
04241413 A71EM 599 1996	50.110	W 5B8AD
04241424 A71EM 579 1996	50.109	5B8AD

UNITED ARAB EMIRATES

04241407 A61Q 569 2335 50.110 SB4FL

Reports of Asia (FarEast)

CHINA

04060813 BD4SI CQ SSB 2478	50.110	JG3LEB
04150312 BD4XA LOUD SSB 2478	50.110	JG3LEB
04150313 BD4XA >QM05	50.110	H JA1VOK
04160130 BD4SI >QM05	50.290	H JA1VOK
04160208 BD4SI >PM95	50.289	S JE1CUS
04160230 BD4XA >QM05	50.110	H JA1VOK
04160231 BD4XA CQ 2478	50.115	JE2OTM
04160234 BD4XA >PM95	50.110	S JE1CUS
04190623 BD4XA CQ 2478	50.110	JR2HCB

JAPAN

04051509 JB9JE 59A/59A JP50		OZ3ZW
04170426 JA3EGE 51	50.110	H VK4ABW
04271026 JR6EXN 59 >QH30GT	50.110	VK4ABW
04301238 JR6EXN EME 10550	50.032	J WIJJ

KOREAS.

04060538 HL1JV >QM05 50.110 H JA1VOK

MALAYSIA, WEST

04300812 9M2/JR1WZI 5273 50.110 JA3FYC

04300827 9M2/JR1WZI 559>PM53 4390 JF2AIA

TAIWAN

04090715 BY TV VID 57 >QH30GT	49.750	V VK4ABW
04220841 BY/AUDIO 250* 2414	51.247	JG3LEB
04260449 BY/CHAT 2414	50.100	JG3LEB

VIETNAM

04300653 XV1X CQ CW 3818	50.110	JG3LEB
04300727 XV1X 3818	50.120	JA3EMU

Reports of Europe

ALAND IS.

04131900 OH0JFP 559>JN65>KP00 1713		S57RR
04131901 OH0JFP BURST>J0801K 1127		H SP6MLK
04132031 OH0A 539 >JN65 1713	50.140	H S57RR
04132039 OH0JFP 579 >JN65 1713	.190	S57RR

AUSTRIA

04010714 OE5MPL 227 JT6M 980	50.230	OZ1DJJ
04030906 OE5MPL CQ MS 943	50.230	F8RZ
04090852 OE5MPL JT6M IONO 1491	.230	G4PCI
04090920 OE5MPL JN78CJ>IN73DM 1626		EB1IEHO
04100946 OE5MPL JN78CJ>IN73DM 1626		EB1IEHO
04101052 OE5MPL 838	50.230	JL1UQ
04121535 OE5MPL JN18GR>JN78 915	.230	H F5DQR
04160713 OE5MPL 27 JT6M 1556	50.230	GW6TEO
04160718 OE5MPL JT6M 1491	50.227	J GOCHE
04160739 OE5MPL JT6M PETE 1491	.227	J GOGMS
04161035 OE5MPL CQ JT6M MS 1491	.230	G4PCI
04161042 OE5MPL 1915	50.230	EC1DMY
04170722 OE5MPL CQ JT6M 322	50.230	HA2ZR
04170805 OE5MPL JT6M PETE 1496	.227	J LA8NK
04221230 OE5UAL CQ 789	50.150	DK2EA

AZORES

04191607 CU3URA 1752 50.013 B CT1FFU

BELARUS

04012316 EU/VID 8465 48.237 KE4WBO

BELGIUM

04081751 ON5FU 1779	50.230	PE2PE
04140812 ON6AB 1785	50.230	DL5NAM
04150953 ON5CT 59+ ES 1587	50.110	EA7KWM
04151101 ON3RDP IN61CC>J021CD	1445	CT1DHM
04151328 ON5CT 1264	50.125	OM7PY
04161047 ON4IQ CQ JT6M 1922	50.230	G4PCI
04161157 ON4IQ CQ JT6M 1922	50.230	GOCHE
04211659 ON6AB J021EC>IN73DM 1133		EB1IEHO
04211702 ON6AB JT6M MS 1922	50.230	G4PCI
04220520 ON6AB JN98>J021 1086	50.230	HA6NN
04231015 ON6AU 1197	50.160	H HA3HV
04241703 ON6AB JT6M MS 1922	50.230	G4PCI
04280944 ON6AB J021EC>IN73DM 1133		EB1IEHO
04291823 ON5PU 1521	50.230	SOSAS
04300811 ON4AVU J011>IN73 1100	.233	J EB1IEHO

BULGARIA

04031142 LZ2CM 05W >KN13KE 416	.045	B YO7VS
04040829 LZ2CM 1550ASL/05W>GP 401		B YO7VS
04060818 LZ2CM 599 >KN13NE 401	.045	B YO7VS
04081654 LZ2CM 599 369	50.045	B YO7VS
04082027 LZ1UQ JT6M MITKO 1000	.233	J SP9HWY
04090925 LZ1UQ JT6M MITKO 1474	50.234	J IW3SNU
04091604 LZ1UQ JT6M MS 1762	50.233	J O21DJJ
04150744 LZ1UQ JT6M MITKO 1000	.233	J SP9HWY
04170804 LZ2CM 599 >KN13NE 401	.045	B YO7VS
04170954 LZ1UQ -5DB 1, 3 SEC 1474		IW5DHN
04170217 LZ1UQ JT6M MS 1762	50.255	J O21DJJ
04220946 LZ4KK JT6M 1474	50.222	J IZKBD
04221147 LZ4KK 1684 JT6M 1762	50.220	J O21BNN
04290748 LZ4KK JT6M MS 1762	50.230	O21DJJ
04302010 LZ3RX EME JT65 >CM88	50.196	J K6QXY

CAPRI

04011559 IC8CQF PASQUALE 1154 50.233 SP9HWY

CROATIA

04020911 9A1Z 599/599 JN86 368	.100	C HA1YA
04160850 9A8A 59 JT6M 1565	50.230	J GOGMS
04241523 9A6CM 579 JN74OD ZADAR 296		S57RR
04301258 9A5T 59/59 JN85US 328	.111	S HA3HV

CZECH REPUBLIC

04150929 OK1WT 549 CQ >JN65	50.100	H S57RR
04161008 OK2BZQ MS/TROPO JT6M 111	50.100	J SP9HWY
04161036 OK2BZQ MS 1570	50.230	J G4IGO
04161230 OK2BZQ JN99GM 1537	50.230	G0CHE

DENMARK

04010738 O21DJJ CQ JT6M 1218	50.230	HA3MQ
04011238 O23ZW 25 J054>JN98 865	.230	HA6NN
04020956 O21PIF J065AN>JN98 917	.230	HA6NN
04021541 O23ZW J054>JN98 865	50.230	HAGNO
04041545 O23ZW CO 1086	50.230	G4IGO
04050843 OZ1PIF MS 1086	50.230	J G4IGO
04060839 OZ3ZW J054>JN98 865	50.230	HA6NN
04092123 O2LDL AU 555	50.097	WL8NK
04092137 O2DJU AU 555	50.097	WL8NK
04101455 O20JZ JT6M 1086	50.230	J G4PCI
04110729 O23ZW TORBEN 1762	50.233	J LZ1UQ
04111301 O21DJJ JT6M MS 1086	50.230	J G4PCI
04111315 O21DJJ J065HP>JN18GR 1024	.230	H F5DQK
04111428 O23ZW JT6M CO 1146	50.230	H IZWSG
04111435 O23ZW JT6M >JN18GR 947	.230	H F5DQK
04120602 O23ZW JT6M MS 1086	50.230	J G4PCI
04121854 O28ZS JT6M MS 1086	50.230	J G4PCI
04122040 O2P2J JT6M JO909N 792	.233	J SP9HWY
04122120 O2P2J 20 SEC BURST 555	.230	WL8NK
04131709 O2P2J JO65ER>JN18GR 1024		H F5DQK
04131731 O2LDL JT6M MS 1086	50.222	J G4PCI
04132012 O2LDL JT6M MS 1086	50.230	J G4PCI
04132023 O2LDL FR MS 1086	50.230	J G4IGO
04132058 O2LDL 559>JN65 1120	50.195	J S57RR
04140747 O23ZW FB MS 1086	50.230	J G4IGO
04141033 O27IGY 43A JO55>JP20 658		LA4CQ
04151214 O22LDM 539>JO22QD 524	.101	PA2JWN
04151233 O21BNN 55 QSB 1146	50.168	IK5RLP
04160910 O2P2J JO65ER>IN73DM 1870		EB1IEHO
04161256 O2P2J CQ JT6M MS 1086	.230	J G4PCI
04191846 O28ZS W/ EA3 2038	50.230	H EB1IEHO
04211425 O21DJJ 41 1146	50.264	J IW3SNU
04220532 O23ZW J054>JN98 865	50.230	HA6NN
04220811 O28ZS JO55>IN73 1787	.226	EB1IEHO
04220846 O21PIF J065AN>JN98 917	.230	HA6NN
04221019 O21DJJ J065HP>JN18GR 905	.230	HA6NN
04221035 O21DJJ J065HP>JN18GR 1029		H F5DQK
04221149 O21BNN JORGEN 1762	50.220	J L24KK
04221252 O21DPR 55>JN65 1120	50.150	S57RR
04250730 O2P2J JT6M 1146	50.230	J IZKBD
04250855 O2P2J JT6M 1146	.230	HA6NN
04251454 O27IGY 529 J043>J055 257		DJ9YE
04251801 O250MHZ J055 222	50.173	DL2NO
04252021 O250MHZ LOUD 1086	50.230	J GOGMS
04300758 O23ZW CO 1146	50.222	I2WSG
04300858 O21DJJ JT6M 1146	50.233	J IZKBD
04301339 O2P2J JN86U 1084	50.160	H HA3HV
04301402 O21BNN 1218	50.230	HA3HV
04301430 O20JD CQ 555	50.230	LA8NK
04301715 O28ZS JT6M 1188	50.230	F5DQK

ENGLAND

04010658 G4DEZ JN98>J003 1423	50.230	HA6NN
04010804 G4DEZ J003AE>JN18GR 525		H F5DQK
04010809 G4DEZ JT6M 927	50.230	J IK15OW

04010818 G4DEZ JT6M 927	50.230 J I2WSG	04231124 G8XQS/P 333	50.190 GW8IZR	04212211 F5TMQ NICE ROCKS	50.220 J IW3SNU
04010834 G4PUI >JN18GR 444	50.230 H F5DKQ	04231138 G8BCG/P 333	50.148 GW8IZR	04230735 FIGTU JN98>JN03 1435	50.230 HA6NN
04011211 G4DEZ CQ JT6M 1012	50.230 DF2UQ	04231154 G6UT J001>J031 424	50.170 DH6JL	04230831 F4EGZ WEAK 1188	50.201 O21BNB
04020720 GOCHE CQ JT6M 333	50.230 GW6TEO	04231200 G8BCG/P I070>J031 853	.148 DH6JL	04231746 FIGTU CQ JT6M 1188	50.230 O21DJJ
04020727 G1ZJP CQ JT6M 333	50.230 GW6TEO	04231311 G8XQS/P CQ 925	50.150 MM0BSM	04232231 F5TMJ JN03>I071 996	50.230 J GW6TEO
04020810 GOCHE CQ JT6M 1814	50.230 HA3MQ	04231504 G1OAR JT6M MS 1086	50.230 O21DJJ	04241621 F5PAU 539 IN/OUT>JN65 623	H S57RR
04021041 G4DEZ JN98>J003 1423	50.230 HA6NN	04232157 G1OAR JT6M 1202	50.230 HS5MLE	04281536 FIGTU JT6M 813	G4UCJ
04021307 G1OAR MS PETER 1550	50.230 J SP9HWY	04241458 G4DEZ JT6M 1814	50.230 HA8CE	04281600 FIGTU JT6M 1082 971	50.230 GOGMS
04021544 G4DEZ JN98>J003 1423	50.230 HA6NN	04251753 GX7VHF J001>J022 295	50.230 J PE1RZG	04281803 FIGTU JT6M MS 1188	50.230 O21DJJ
04031250 G4DEZ JN98>J003 1423	50.230 HA6NN	04251804 GX7VHF JT6M MS 1086	50.230 J O21DJJ	04290612 FIGTU CQ JT6M 813	GOCHE
04031602 G4DEZ 1533	50.230 J S59F	04251811 GOCHE CQ JT6M 333	50.230 GW6TEO	04290613 FIGTU JN05IF>IN73DM 543	E81EHO
04031618 G4DEZ JN98>J003 1423	50.230 HA6NN	04252054 G4DEZ CQ 1922	50.140 ON6AB	04290627 FIGTU JT6M 155	50.230 J IW3SNU
04031849 G1SDX IO8FJ9>IN73DM 781	EB1EHO	04252118 G4DEZ J003 2003	50.140 ON5PU	04290700 FIGTU JO90NH 1178	50.230 J SP9HWY
04040731 G4DEZ JN98>J003 1423	50.230 HA6NN	04261959 G0GMS 449 925	50.098 MM0CIN	04290705 FIGTU 1188	50.230 O23ZW
040611954 G4GIO 1814	50.230 J HA3MQ	04271843 G1OAR IO82>IN73 1018	50.230 EB1EHO	04290721 FIGTU 1177	50.230 SQ9QU
04080854 G4DEZ J003AE>JN18GR 525	H F5DKQ	04280737 G4DEZ JO03AE>IN73DM 1154	50.230 EB1EHO	04290925 FIGTU JT6M MS 813	50.230 J G4PC1
04080855 G4IDZ >JN18GR 444	50.230 H F5DKQ	04281013 G8PL J001>IN73 1019	50.230 EB1EHO	04291122 FIGTU JT6M IO81>JN05 889	J GW3ORL
04080914 G4DEZ J003AE>IN73DM 1154	EB1EHO	04281537 G4DEZ JO03AE>JN18GR 525	H F5DKQ	04300947 FIGTU 1713	50.230 L88NK
04081813 G0GMS JT6M TONY 596	50.230 J PE2PE	04281552 G0GMS 1122	50.220 EA5DWS	04301014 F5LNU JT6M MS 813	50.235 G4PC1
04090705 G0GMS CQ 1412	50.230 LA8NK	04281806 G4DEZ JT6M MS 1086	50.230 O21DJJ	04301023 FIGTU JN05IF>IN73DM 543	E81EHO
04090803 GOCHE IO90>JN18 322	50.230 H F5DKQ	04282302 G1OAR CQ 1412	50.230 LA8NK	04301754 FIGTU CQ JT6M 813	G4PC1
04090906 GOCHE G4IDG JT6M 813	50.230 H F5DKQ	04290557 G1OAR PETER 1550	50.230 SP9HWY		
04090906 GOCHE CQ JT6M 333	50.230 GW6TEO	04290713 G4DEZ JT6M 1456	50.230 OM7PY		
04090917 GOCHE 227 IO90>IN73 853	EB1EHO	04290800 G0GMS IO90>JN98 1456	50.222 HA6NN		
040911434 G4DEZ J003AE>IN73DM 1154	EB1EHO	04290944 G4PCI CQ 1412	50.230 LA8NK		
04091513 G4DEZ J021>J003 385	50.230 PE2PE	04291312 G4DEZ CQ JT6M 1922	50.230 ON5PU		
04091926 G4DEZ J021>J003 385	50.230 PE2PE	04300720 G4IGO IO80>IN73 802	50.230 EB1EHO		
04092121 G4DEZ 52A 925	50.100 MMB0SM	04300728 G4IGO JT6M 927	50.214 J I2KBD		
04111754 G0GMS 5B TONY 1550	50.235 H SP6MLK	04300911 G0GMS IO82>IN73 1018	50.230 EB1EHO		
04120006 G0GMS 722	50.230 LX2SM	04300944 G1OAR 227 CQ 1412	50.230 LA8NK		
04121901 G4PCI JT6M 1086	50.230 J Q82S	04301101 GB3SOJ 529 >IN78 827 50.064 B F6KMU	50.230 EB1EHO		
04131554 G8VVK CLG HA4XG 1550	50.230 SP9HWY	04301122 G4DEZ JO03AE>IN73DM 1154	50.230 LA8NK		
04131556 G0GMS CQ 1412	50.230 LA8NK	04301755 G4DEZ 1412	50.230 F5DQK		
04131751 G4DEZ J003AE>JN18GR 525	H F5DKQ	04301817 G4DEZ JT6M 813	50.230 EB1EHO		
04132033 GX7VHF J001>IN73 1019	.230 EB1EHO	04301818 G4DEZ JO03AE>IN73DM 1154	50.230 EB1EHO		
04132133 G1OAR CQ 1412	50.230 LA8NK				
04140556 GB3VHF 56A QT6 010 925 .064	H GM4NFC				
04140735 GOCHE CQ JT6M 927	50.230 H I2WSG				
04140738 GOCHE CQ JT6M 333	50.230 GW6TEO				
04140826 G4IGO IO80>IM7 1489 50.222	EB7COL				
04141156 G4PCI IO91AL>IN73DM 928	EB1EHO				
04141628 G4DEZ 55A CQ 1412	50.104 LA4CQ				
04141721 G4DEZ 55A>IO85WV 555 50.104 H GM0AXY					
04141745 G0GMS 55A IO82>IO94 258	G4FVP				
04142233 G4DEZ IONO/MS 1412	50.230 J LA8NK				
04150854 GOCHE 225 IO90>IN73 853	EB1EHO				
04150855 G4PCI IO91AL>IN73DM 928	EB1EHO				
04150920 GOCHE JT6M KEV 1412	50.222 J LA8NK				
04151304 G4DEZ 59JN98 1597 50.140 OM5KM					
04151327 G4DEZ BRIAN STRONG 1814					
04151335 2EOKBJ 1814	50.145 HA2VR				
04151336 M3SDE 1456	50.155 OM7PY				
04151349 GOJHC S9->JN86 1533 50.160 HA2VR					
04151355 GOXLT 55 55 IO93WX Kevin	HA3HV				
04151356 GOJHC 59 IO93PQJ>JN78C 1316	OESMPL				
04151448 G4PUI 55 BSC 434	50.131 E17BMB				
04151623 G4TGO SILVIO 927	50.230 J I2WSG				
04160824 G4DEZ CQ JT6M 1565	50.230 9A8A				
04160832 GOCHE I090>IN73 853	50.230 EB1EHO				
04160844 G4DEZ 1565	50.230 J 9A8A				
04160943 G0GMS IO82>J021 558	50.230 PE2PE				
04161107 G4DEZ J003AE>IN73DM 1154	EB1EHO				
04161313 G4PCI IO91AL>IN73DM 928	EB1EHO				
04162102 G4DEZ J02>IM7 1708 50.223 EB7COL					
04162102 G4DEZ JT6M 1202	50.230 H SM5LE				
04170713 G4IGO CQ 1412	50.230 LA8NK				
04170745 G4PCI 1412	50.230 LA8NK				
04170830 GOCHE MS SILVIO 927	50.235 J I2WSG				
04171100 GOCHE I090>IN73 853	50.230 EB1EHO				
04180835 G0GMS IO82>IN73 1018 50.230 EB1EHO					
04181316 G4DEZ J003AE>IN73DM 1154	EB1EHO				
04190720 G8VVK JT6M 1202	50.230 J EB7COL				
04190731 G3UJM CQ JT6M 333	50.230 GW6TEO				
04191224 GOCHE KEV 813	50.223 F5TND				
04200945 G0GMS -14 JT6M 3 SEC 1202	SM5LE				
04210659 G8VVK J001FO>IN73DM 1009	EB1EHO				
04211020 GOCHE I090>IN73 853	50.230 EB1EHO				
04211043 GOCHE I090>IM87 1500	50.230 EA7DFH				
04211227 GOCHE 1675	50.225 CN8LI				
04211457 G8VVK JT6M 1412	50.230 J LA8NK				
04212031 GOMKS K002 1667	50.230 S05AS				
04220555 GOCHE CQ JT6M 1922	50.230 ON6AB				
04220643 G4DEZ JN98>J003 1423	50.230 HA4NN				
04220710 GOCHE KEV 1122	50.227 J EB7COL				
04220741 G4IGO I080>JN98 1597	50.230 HA6NN				
04220806 GOCHE JT6M 927	50.227 J I2KBD				
04221042 G1OAR I082>IN73DM 1018	EB1EHO				
04221059 G4DEZ CQ 1412	50.230 HA2RD				
04221093 G1OAR I082>JN18GR 572	H F5DQK				
04221147 GOCHE VERY WEAK 859	50.230 HB9QO				
04221205 G4DEZ CQ JT6M 1202	50.230 H SM5LE				
04221206 G4DEZ CQ JT6M 1202	50.230 LA8NK				
04221207 GOCHE CQ 1412	50.230 HA8CE				
04221209 GOCHE I080>IN73DM 1018	EB1EHO				
04221217 GOCHE 55 >JN65 1310	50.150 H IW3SNU				
04221219 GOCHE 55 >JN65 1310	50.150 PE7FM				
04221230 GOCHE 55 >JN65 1310	50.135 PE7FM				
04221231 GOCHE 55 >JN65 1310	50.147 HA1WD				
04221235 G4PCF P HUGO >I086 667 180	GM4ZUK				
04231016 G0GMS 1479	50.220 CT1DHM				
04231033 G4PCI 1479	50.220 CT1DHM				
04231034 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231044 G4IGO JT6M 1479	50.220 CT1DHM				
04231052 G4ODA 333	50.160 GB8BIZ				
04231053 G4ODA I092>J031 571	50.160 D6HJL				
04231054 G4ODA J003>J031 478	50.140 D6HJL				
04231101 G3MREH I091>J031 563	50.165 D6HJL				
04231102 G4DEZ JN98>J003 1423	50.230 DL2FDL				
04231103 G4PCF 1479	50.220 CT1DHM				
04231104 G4PCF 1479	50.220 CT1DHM				
04231105 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231106 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231107 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231108 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231109 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231110 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231111 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
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04231129 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231130 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231131 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231132 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231133 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231134 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
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04231157 G4DEZ 57 MS>JN65 1310 .140	H IW3SNU				
04231158 G4DEZ 57 MS>JN65 1310 .14					

SLOVENIA

04010752	S59F CQ JT6M 306	50.230	HA3MQ	04160847	EA3AXV CQ JT6M 2038	50.230	OZ1DJJ	04300716	EA3AXV JT6M 1121	50.230	J I2KBD
04020810	S59F JT6M IVO 1533	50.230	J G0CHE	04160851	EA3AXV CQ 1878	50.230	DL2NO	04300913	EA3AXV FB IONO 1122	50.220	GOMGS
04021346	S59F CQ JT6M 1619	50.230	GW6TEO	04160857	EB1EHO CQ JT6M 2038	50.230	OZ1DJJ	04301024	EA3AXV JN01>IN73DM 593	.230	EB1EHO
04031604	S59F 1533	50.230	J G4DEZ	04160920	EB1EHO IN73DM>JO65BR 1870	50.230	OZ2PJ	04301044	EA1KIV IN520G>IN73DM 286	.230	EB1EHO
04041533	S57RR CW 779	50.100	IK2UTT	04161235	EB1EHO CQ JT6M 1122	50.230	GOCHE	04301137	EB3EHJ IM98JN01 374	.230	W EB5EEO
04061653	S59F CQ JT6M 1533	50.230	G0CHE	04161247	EB1EHO 555	50.230	J CN8LI	04301147	EB1EHO CQ JT6M 1122	.230	GOCHE
04080824	S59F JN65>IN73 1495	50.230	EB1EHO	04161302	EB1EHO CQ MS IN73 688	.230	C1FFU	04301245	EB1EHO JT6M MS 1122	.230	G4PCI
04091715	S57RR 559 JN65 TR 627	.100	HA1YA	04161343	EA3SIX IM88>JN01 476	50.055	B EA5AGR				
04091717	S59A 599+ 306	50.100	HA1YA	04161618	EB1EHO EB17COL	50.230	G4PCI				
04131929	S57RR 559 ROBERTO 468	.156	SP6MLK	04161835	EB1EHO CQ 555	50.230	CN8LI				
04131937	S57RR 57-8 779	50.168	IK5RLP	04161940	EB1EHO JT6M MS 1122	.230	G4PCI				
04140801	S59F JN65>IN73 1495	50.230	EB1EHO	04170817	EA3AXV IN73DM>JN01 593	.230	EB1EHO				
04141450	S59F GD SIGS 1533	50.230	J G0CHE	04171028	EB1EHO JT6M 2188	.230	J HA3MQ				
04150811	S59F JT6M MS 1533	50.230	G4PCI	04171108	EB1EHO CQ 599>JO30BU 1449	.233	D2M				
04150816	S59F JN65>IN73 1495	50.230	H EB1EHO	04171124	EB5EEO CQ JT6M 1122	.230	J GOCHE				
04160648	S59F 1053	50.233	ON6AB	04171130	EB1EHO CQ JT6M 1122	.230	GOCHE				
04160925	S50W 932	50.145	F8RZ	04171527	EB1EHO CQ JT6M 1122	.230	G4PCI				
04160931	S50W BURSTS 932	50.145	F4EGZ	04171549	EA3AXV JT6M IONO 1122	.230	G4PCI				
04160945	S50W 599 306	50.096	HA1YA	04171659	EB7HAF CQ JT6M 1122	.230	GOCHE				
04160957	S50W 3SEC>JO21 1034	50.096	H PA5NM	04180654	EB1EHO CQ JT6M 1453	.230	GW6TEO				
04181331	S59F JT6M MS 1533	50.230	G4PCI	04181211	EB7DBX IM67LG>IN73DM 703		EB1EHO				
04190959	S59F JN65>IN73 1495	50.230	EB1EHO	04181655	EB1EHO JT6M MS 1122	.230	G4PCI				
04220602	S54T QUICK JT6M 1533	50.230	J G0CHE	04181730	EB7DBX IM67LG>IN73DM 703		EB1EHO				
04220605	S54T HUGE SIGS 1053	50.230	ON6AB	04181734	EH5AX CQ PSK JT065R 2115		G4PCI				
04220622	S54T JT6M 468	50.233	SP9HWY	04181827	EA3AXV JT6M MS 1122	.230	G4PCI				
04221445	S57RR 59 779	50.220	IW2NXI	04190708	EB1EHO CQ JT6M 1453	.230	GW6TEO				
04221452	S57RR 887	50.220	H DK2EA	04191426	EA3AXV JT6M IONO 1122	.230	G4PCI				
04221510	S57RR 306	50.160	W HA3HV	04191521	EH2AOV CQ PSK31 2038	.250	OZ2PJ				
04221610	S57RR 887	50.195	WD2KEA	04191625	EA3AXV CQ JT6M 1371	.230	LX2SM	04200946	SM5LE SVEN JO99>IO82 1562	.230	GOGMS
04270727	S54T JT6M MS 1533	50.230	G0CHE	04191815	EA3AXV JT6M MS 1122	.230	G4PCI	04211108	SM7DZL MS HANS 1202	.225	GOCHE
04281133	S59F JT6M MS 1084	50.230	ZQ1DJJ	04191848	EA3AXV W/ OZ8ZS 1371	.230	LX2SM	04220444	SM7DZL J086F1>JN98 889	.230	HA6NN
04281152	S59F JT6M CQ 1533	50.232	G4UCJ	04191903	EA3AXV JT6M JN01>J055 1717		OZ8ZS	04220912	SM5LE JN099BD>JN98 1184	.223	HA6NN
04301559	S59F JN65>IN73 1495	50.230	H EB1EHO	04192106	EB1EHO CQ JT6M 1122	.230	GOCHE	04221034	SM5LE JN099>I071 1739	.236	GW6TEO
04301614	S59F JT6M IVO 1366	50.230	GU8FBQ	04201156	EA3AXV JT6M MS>IONO 1453		GW3ORL	04221045	SM7DZL 30S BURST 1513	.230	E17BMB
04301704	S59F JT6M MS 1533	50.230	G4PCI	04201193	EA3AXV JN01>IN73DM 593	.230	EB1EHO	04222113	SM7DZL J086>I071 1533	.222	GW6TEO

SPAIN

04011912	ED4URA 59	50.130	CT1FMX	04201130	EA3AXV CQ PSK JT065R 2115		EB1EHO	04222106	SM5LE 1202	.230	J GOGMS
04020644	EA2RL/P IN83 671	50.205	F6FHP	04211032	EA3AXV JN01>IN73DM 593	.230	J GOGMS	04222107	SM5LE 205	.230	DF2UQ
04021810	EB1EHO JT6M 1122	50.230	G0CHE	04211042	EA3AXV CQ JT6M 983	.230	F5SD	04222108	SM5LE JN01>IN73DM 1054	.230	GW6TEO
04031317	EB1EHO JT6M MS 1122	50.230	G4PCI	04211058	EA3AXV JT6M 1122	.230	GOCHE	042280928	SM5LE SVEN MS 2001	.230	ON6AB
04031813	EB1EHO JT6M MS 1122	50.230	G4PCI	04211219	EA7DUD CQ JT6M 1122	.230	GOCHE				
04031816	EB1EHO VY LOUD 1122	50.230	GOHMS	04211234	EA2AXV JN01>IM88 913	.230	CT1DRB				
04080956	EH4CRP IM73DM>IM68 568	.230	EB1EHO	04211300	EA5AGR IM88>IN73DM 602	.230	EB1EHO				
04080959	EH4CRP CQ JT6M 1453	50.230	GW6TEO	04211600	EB1EHO CQ JT6M 1122	.230	GOCHE				
04081312	EB1EHO JT6M MS 1122	50.230	G4PCI	04211634	EA3AXV CQ JT6M 1122	.230	GOCHE				
04081328	EB1EHO JT6M MS 1122	50.230	J G0CHE	04211651	EB1BMO JT6M 555	.230	J GOCHE				
04090829	EB2DVT JT6M 983	50.233	H F5DQK	04211712	EA3AXV JT6M MS 1122	.230	G4PCI				
04090912	EB1EHO CQ JT6M 1453	50.230	GW6TEO	04211844	EA3AXV JT6M IONO 1122	.230	G4PCI				
04091922	EB1EHO IN73DM>JN01 1194		PE2PE	04211851	EA3AXV JT6M IONO SCATTER QUIM		GOGMS				
04100653	EB1EHO CQ JT6M 1453	50.230	GW6TEO	04220708	EB7COL JT6M MS 1122	.227	J GOCHE				
04110653	EB1EHO CQ JT6M 1453	50.230	GW6TEO	04220724	EB1DUD JT6M MS 1122	.227	GOCHE				
04111412	EA3AXV JT6M MS 1122	50.230	G4PCI	04220728	EA3AXV JT6M 25	.236	J GOCHE				
04111419	EA3AXV JN18GR 1091	50.230	H F5DQK	04220808	EB1EHO JT6M IN73>J055 1756	J	OZ8ZS				
04111439	EA3AXV JT6M 2038	50.230	ZQ2ZW	04220834	EB7HAF JT6M MS 1122	.245	J GOCHE				
04111706	EA3AXV JT6M MS 1122	50.230	G4PCI	04220840	EA1KV IN520G>IN73DM 782	J	EB1EHO				
04111712	EA3AXV CQ JT6M 2161	50.230	SP6MLK	04220855	EA3AXV MS QUIM 2494	.222	L24KK				
04111721	EA3AXV FB IONO/MS 1122	230	J G0MS	04220910	EA3AXV JN01>IN73DM 593	.230	H EB1EHO				
04111835	EA3AXV CQ JT6M MS 1122	.230	G4PCI	04220920	EB7DBX JT6M MS 1122	.220	J G4PCI				
04121206	EB1EHO JT6M MS 1122	50.230	I2WSG	04220930	EH4CRP IM68>IN73DM 568	.220	EB1EHO				
04121227	EB1EHO JT6M MS 1122	50.230	G4PCI	04220932	EA3AXV JT6M 7DB	.220	G4UCJ				
04121234	EA3AXV IN73DM>JN01 593	.230	EB1EHO	04220935	EA3AXV JT6M 1878	.230	DF2UQ				
04121347	EA3AXV JT6M MS 1121	50.230	H I2WSG	04220947	EB7DBX 30 IM67LG>IN73DM 703	J	EB1EHO				
04121509	EA3AXV 6,45 10DB 2161	.230	SP9HWY	04220948	EB7DBX FB JT6M MS 1453	.220	J GW3ORL				
04121598	EA3AXV JT6M 1534	50.230	PE2PE	04221029	EA3AXV JT6M MS 2038	.230	J OZ1DJJ				
04130704	EA3AXV IN73DM>JN01 593	.230	EB1EHO	04221036	EB1EHO JN73DM>JN18GR 859	H	F5DQK				
04130810	EB1EHO CQ JT6M MS 1122	.230	G3UYM	04221051	EB1EHO JT6M MS 1122	.230	G4PCI				
04131658	EA3AXV FB SIG QUIM 1122	50.230	J G0CHE	04221641	EB1EHO JT6M MS 1122	.230	G4PCI				
04131719	EA3AXV JN18GR>JN01 812	.230	H F5DQK	04221713	EA3AXV JN01>IN61 665	.225	CT1DRH				
04140734	EB1EHO GOOD REF IN73 976		I2WSG	04221727	EB7DBX IN73DM>IM67LG 703		EB1EHO				
04140737	EB1EHO CQ JT6M 1453	.230	GW6TEO	04221816	EA3AXV JN01>IN73DM 593	.230	EB1EHO				
04140828	EA3AXV FB MS 1122	.222	J G4ICO	04220709	EA3AXV JT6M JN01TJ 1386		G4QPC				
04141025	EA3AXV CQ JT6M 1122	.230	G0CHE	04230726	EA3AXV JT6M 2161	.235	J QSOQU				
04141049	EA3AXV 30SEC IONO 1122	.230	G4DEZ	04230731	EA3AXV JN98>JN01 1609	.230	HA6NN				
04141054	EA3AXV JT6M IONO 1122	.230	G4PCI	04230917	EA3AXV CQ JT6M 1878	.230	DF2UQ				
04141106	EA3AXV IN73DM>JN01 593	.230	H EB1EHO	04230917	EA3AXV CQ JT6M 1878	.230	GW8FBQ				
04141148	EA3AXV JT6M 1122	.225	G4PCI	04230919	EA3AXV JT6M MS 943	.230	J G4UCJ				
04141739	EB1BME 448Z>J0750 1651	.100	GM4WZL	04231002	EA3AXV JN98>JN01 1609	.230	HA6NN				
04141805	EA3AXV CQ JT6M 1122	.230	G0CHE	04231004	EA3AXV JT6M 1122	.230	H G8RZA				
04141829	EA3AXV 20DB FB IONO/MS 1122	.230	GOHMS	04231343	EA3AXV JT6M IONO 943	.230	EB7DFH				
04150801	EB1EHO JT6M MS 1122	.230	G4PCI	04232247	EH4CRP IM68>C170 1453	.230	GW6TEO				
04150830	EA3AXV IN73DM>JN01 593	.230	EB1EHO	04240951	EB5EEBO JT6M IM98>J081 1464	J	GW3ORL				
04150838	EA3AXV CQ JT6M 1121	.230	IK1KXP	04241020	EA7DFH JT6M IM87>J081 1556	J	GW3ORL				
04150911	EA3AXV JT6M 1122	.225	J G10AR	04241603	EA3AXV JT6M MS 1122	.230	G4PCI				
04150938	EB1EHO 33 JT6M 1453	.230	GW6TEO	04241620	EA3AXV S9 BURSTS 1587	.230	ON6AB				
04150954	EA3VHF >I092 1368	.070	G4PQO	04241857	EB1EHO CQ JT6M 1122	.230	GOCHE				
04150955	EA3VHF 599 JN01>I090 1041		B7RAU	04242110	EA3AXV IM87>JN01 561	.230	EA7DFH				
04150959	EA3AXV 59 JT6M ES 1122	.230	G4PCI	04242144	EA3AXV S7 1587	.230	OZ2PJ				
04151021	EA3AXV IN88>I071 362	.225	GW6TEO	04251333	EA7DUD JT6M IN73>IM76 778		EB1BMO				
0415											

BARBADOS

04141622 8P6SH DEAN GK03 242 50.110 FM5JC

CANADA, Eastern

04021619 VE3GIB CW FN25>EN82 721 K8KS
 04090904 VA2ZFN 52A FN08>EN44 1018 B K9MU
 04090918 VE3QAT AUR >EN82 50.054 K8ZE
 04091408 VA3WLD FN03>EN82 343 50.125 K8KS
 04092104 VE3TFU 52A 730 50.125 K9MU
 04092112 VE3TFU 57A EN92>EN44 835 K8MD
 04140150 VE2XX 55A FN07>EN82 50.125 K9MU
 04140355 VE2XX 56A FN07>EN93 50.125 VE3SCP
 04140447 VE2XX FN07>EN10 1630 50.125 KOHA
 04140531 VE2XX 57A FN07>EN43 1033 KA9FOX
 04141512 VE2RA 599 730 50.125 W9SE
 04142031 VE2XX AU FN07>EN82 50.125 K8MD
 04142040 VE2XX 51A FN07>EN44 983 K9MU
 04142055 VE3GIB 55A FN25>FN35 96 VE2DC
 04142059 VE3Z?? AW WEAK 634 50.125 K1TTT
 04142116 VE2RA CQ AU SSB 634 50.125 K1TTT
 04142145 VE2XX FN07>EN82 701 .130 K1TTT
 04150441 VE2YAT FO40>FN48 222 50.054 VE2RA
 04221441 VE3GIB FN25 CW 854 50.125 W2BD
 04231322 VA3VHL 559 BSC FN03 50.125 K2ERG
 04281357 VELSMU 552 50.001 K8LEE
 04301057 VE3/NP2AQ CW FN25 50.125 VE2DC

CANADA, Northern

040100516 VE8NSD 59 DP22>BP54 50.125 KL7NO
 04140225 VE8BY S3-8 >FN46HU 50.049 B VE2TH
 04140522 VE8BY GUD FP53>EN10 3142 KOHA
 04140505 VE8NSH >DN17HO 50.125 W7RJR
 04140645 VE8BBH 559 AUE >FN35 2016 B VA2WDQ
 04141407 VE8BY AU 2205 50.048 B VA6S2
 04230607 VE8NSD 57A DP20>BP54 50.125 KL7NO

CANADA, Manitoba, VE4

04090531 VE4ARM 53A EN19>EN44 717 B K9MU
 04090631 VE4VHF AURES >FN44 50.035 B K1TOL
 04090750 VE4VHF 51A EN09>EN44 821 K9MU
 04092026 VE4ARM 52A AU 50.019 B K9MU
 04140400 VE4VHF AUR ES >FN44 50.036 B K1TOL
 04140505 VE4ASPT EO26>DN06 50.025 K7AD
 04140730 VE4ASPT EO26>CN87 2141 .025 B N6KW7/
 04142048 VE4VHF 52A 1180 50.019 B K9MU
 04200245 VE4SA 569 EO15>D097 50.125 C KG0VL/VE4
 04220200 VE4VHF AUES >FN44 50.036 B K1TOL

CANADA, Alberta, VE6

04090632 VE4EMU WEAK AU >DN17 50.041 B KE7DJL
 04090928 VE4EMU AU ES 2343 50.042 B K9MU
 04140610 VE6EMU DO33>CN87 970 50.041 B N6KW

CANADA, British Columbia, VE7

04090546 VE7FG >FN44 50.033 B K1TOL
 04090601 VE7DAY 46 >DN17 50.125 KE7DJL
 04090623 VE7DAY 1746 50.100 WORLI/7
 04140558 VE7DAY AU >DN17 50.125 W7RJR
 04140601 VE7DAY 55A CN87>C070 50.125 N6KW7/
 04140709 VE7AV CN87>C083 667 50.125 N6KW7/
 04140722 VE7DAY C070>CN85 575 50.126 WORLI/7

CUBA

04212122 CO TV >EL87 T KD4ESV

GUADELOUPE

04230112 FG5FR 59 FRANTZ 239 50.120 FJ5DX

MARTINIQUE

04091650 FM1HN 59 JULIEN 50.110 FM5JC
 04250028 FM5JC CW 4951 50.110 PY2NQ
 04301959 FM5JC VY WEAK 396 50.106 B FJ5DX

MEXICO

04161421 XE2OR DL98>EM60 1371 50.255 N5BO

NEWFOUNDLAND

04101542 VO12A S1-5 >FN46HU 50.049 B VE2TH

PUERTO RICO

04092147 WP3UX W>FJ5DX 238 50.110 KP2HC
 04212344 WP4KJX >FK77 238 50.110 KP2HC
 04230224 WP4HSZ CQ 50.120 KP4SQ
 04231212 KP4SQ 238 50.110 KP2HC
 04231848 WP4HSZ MALANGA IS. 50.110 KP4SQ

ST BARTHELEMY

04091644 FJ5DX 53/55 PHIL 396 50.110 FM5JC
 04092146 FJ5DX W>WP3UX 212 50.110 KP2HC
 04111656 FJ5DX S3/5 >FK68QA 50.115 WP4NQR

ST KITTS & NEVIS IS.

04091136 V44KAI FK86>FK77 239 50.055 B KP2HC
 04092101 V44KAI FK87>FK77 212 50.055 B KP2HC
 04101809 V44KAI 53 437 50.055 B WP3UX
 04130101 V44KAI 51 437 50.055 B WP3UX
 04181931 V44KAI 51 437 50.055 B WP3UX
 04231215 V44KAI FK87>FK77 212 50.055 B KP2HC
 04231949 V44KAI 52>FK68 437 50.055 B WP3UX
 04232110 V44KAI FK87>FK77 212 50.055 B KP2HC
 04241707 V44KAI FK87 212 50.055 B KP2HC
 04241756 V44KAI 51> FK68 437 50.055 B WP3UX
 04251637 V44KAI 51> FK68 437 50.055 B WP3UX
 04252206 V44KAI 51> FK68 437 50.055 B WP3UX
 04262024 V44KAI 51> FK68 437 50.055 B WP3UX
 04262223 V44KAI 51> FK68 437 50.055 B WP3UX
 04271844 V44KAI 41 WEAK 437 50.055 B WP3UX
 04272201 V44KAI 419 WEAK 437 50.055 B WP3UX

ST LUCIA

04092110 J69AC GEORGE

50.110 FM5JC

VIRGIN IS.

04092236 KP2HC 238 50.110 WP3UX
 04200208 KP2/KD8CZX 55 238 50.110 WP3UX
 04231214 KP2HC 238 50.110 W KP4SQ
 04272154 KP2HC 54 BRIAN 238 50.110 WP3UX

United States, W1

04021500 W2IV 1078 50.125 K8LEE
 04080305 K1BLKB FN31>EM89 873 50.145 W2BD
 04090546 K1TOL FN44>EN43 1599 50.125 KA9FOX
 04090547 K1TOL 59A FN35>FN44 192 VA2WDQ
 04091243 WI2C FN42 222 50.125 K1TTT
 04091440 WI2C FN41>EN82 996 50.125 K8KS
 04091445 WI2A5PL CW VT>MI 1078 K8KS
 04140435 K1BLKB 52A FN31>EN93 50.125 VE3SCP
 04140529 K1TOL 57A >FN35 484 50.111 VA2WDQ
 04140649 K1BLKB 55 AUE 634 50.130 VA2WDQ
 04140705 K1TOL FN44>CN87 3954 50.125 N6KW
 04151220 WIJJ FN41>EN82 996 50.125 K8KS
 04161250 WIJJ 579 FN41>FM08 758 135 W4TJ
 04221440 K1BLKB FN31 STRONG 845 .125 W2BD
 04231626 WIJJ 559 FN41>FM08 758 .130 W4TJ
 04251604 WIJJ -26 JT65A EME 4969 G4PCI
 04291202 WI2A5PL S39>EM79 1281 W8IF
 04301142 WI2A5PL FN35>EM89 1055 W2BD
 04301418 WI1/K7BV 1987 50.260 AG4ZE

United States, W2

04021510 W2/KBZES 701 50.125 K8LEE
 04150218 WB2TQE 55 1647 50.125 KE4WBO
 04160538 W2GFF EM60>EM22 50.099 WB5NRI
 04160541 W2GFF TR EM60>EL09 50.098 WA5IYX

United States, W3

04012156 K3TH 507 50.125 K8LEE
 04021446 K3TKJ FM28>EM60 1412 50.125 H N5BO
 04021455 K3KYR FN24>EM89 862 50.125 W2BD
 04021517 K3TKJ 57 FM28>EN82 808 .125 K8KS
 04021612 K3BMLD FN11>EN82 507 50.125 K8KS
 04050421 K3DE20 EM90 1436 50.125 W2RAC
 04081806 K3KYR 59 FN34>FN35 109 .125 VE2DC
 04091528 K3TKJ 55 SCATTER 1383 .125 K4RX
 04121435 N3II 559 TR 662 50.125 WIJJ
 04130251 K3FEF 44 FM28>FM16 283 .125 W4RV2
 04140554 N3DB 59A 845 50.098 K9MU
 04142135 K3ISH AU 662 50.135 K1TTT
 04152313 W3HH 519 EL89>EL96 387 .061 B KE4WBO
 04221444 W3KWH EN90 338 50.125 W2BD
 04221529 W3GLH EM60 1431 50.125 H N5BO
 04221537 W3GLH 2377 50.125 KOHA
 04221546 N3DB FM18>FM16 222 50.125 N4BAA
 04260113 K3TKJ FM28 721 50.125 W2BD
 04271813 N3II CQ DX 1383 50.111 N4BAA
 04290226 K3TKJ 1383 50.135 K4BDR

United States, W4

04021232 K24RR FL >FM29 1341 50.125 N2NRD
 04021327 W4/LWGD EL87>EM89 1334 W2BD
 04021331 K24RR EM90>EM89 1016 50.125 W2BD
 04021401 W04DX EM74>EM60 482 50.125 N5BO
 04021439 AC4TO/M CW QO 1753 50.125 N5BO
 04021609 W4TAAN EL87>EM60 512 50.135 N5BO
 04030356 WA4VUT 57 EM05>EM20 574 W5DN
 04030405 W4TAAN EL87>EL29 1192 50.125 KE5DFA
 04091354 K4RX ES? EM70>EN82 1345 K8KS
 04091430 W4BSL EM82>EM60 439 50.125 H N5BO
 04091514 K4RX 1346 50.125 K8KS
 04100043 N4BWN EM53>EM54 111 50.125 KDI5KG
 04121142 W4WZR FM05 800 50.125 WB4IUY
 04142304 W4TNJN 1987 50.125 K1KO
 04142321 K4GKJW FM16 1023 50.125 K1KO
 04152306 W4CHA 559 B8 EL88>EL96 195 B KE4WBO
 04152309 K4HRS 599 EL88>EL96 222 B KE4WBO
 04160509 W4MHW > CN85 1487 50.125 WORLI/7
 04160524 K4GJHB EL98>EM22 50.125 W5BNI
 04161314 K4LYC EM80 294 50.125 K4RX
 04161320 W4CHA 539 EL88>EM84 889 50.098 K4RX
 04161324 W4TA 539+ TR EL88 195 .079 B KE4WBO
 04161328 W4CHA TR EL88>EM60 446 .080 B N5BO
 04180056 K4LQ EL97>EM60 671 50.125 N5BO
 04180056 K4LQ EL97>EM60 671 50.125 N5BO
 04180147 K4GJHB EL97>EL99 222 50.130 W2RAC
 04180147 K4GJHB EL97>EL99 222 50.130 W2RAC/4
 04190219 K4YXKR EM51>EM61 189 50.125 NSPA
 04200206 K4GJHT FM07>EM89 412 50.145 W2BD
 04202018 WATAA EL87 S2 M's 1445 .145 W2BD
 04221108 W4WA EM84>FM08 570 50.125 W4TJ
 04221259 W4WA EM84>EN73 1015 50.125 K8EB
 04221307 W4BSLM EM82 889 50.125 K8EB
 04221310 W4BSLM EM81>EM89 889 50.125 W2BD
 04221344 K4PDM EM87>EM99 222 50.125 W2BD
 04221420 W4WA 1346 50.125 K8LEE
 04221454 W4WA ES Sc? 1987 50.125 K1TTT
 04221504 W4WA EM84>EM13 1294 50.125 NORQ
 04221810 W4AHFN FSK EM55>EM60 586 N5BO
 04231100 W4s GA, FL, AL -1400 50.125 K8MM
 04231127 W4WA 559 EM84>FM08 570 .125 W4TJ
 04231147 W4WA 569 EM84>EN82 889 .125 K8KS
 04231155 K4RX 589 EM87>EN82 879 .125 K8KS
 04231204 K4RX EM70 CW 1126 50.125 W2BD
 04231206 K24RR EL87 S2 IASS 1445 50.125 W2BD
 04231208 W4AHFN 41A FSK4 50.260 AG4ZE
 04231230 AC4TO 559 EM70>FM08 1044 W4TJ
 04231335 N4QWZ EM66>FN29 1101 50.125 N2NRD
 04231342 AC4TO EM70>FM29 1351 50.125 N2NRD

04231344 AC4TO 55 EM70>FM08 1044 W4TJ
 04240217 KG4HOT FM07>EM89 412 50.145 W2BD
 04241203 W4WZR EM95>FM05 181 50.125 K4CEB
 04261308 AC4TO 559 EM70>FM08 1558 W4TJ
 04271816 N4BAQ CQ DX 1383 50.110 N3II
 04282113 W4WA EM84>EM60 581 50.125 H N5BO
 04291204 NVHVF 55 EM70>FM08 1044 W4TJ
 04291327 K4PCX 57 EL98>EM70 446 .125 K4RX
 04291443 K4GLR JT6M 50.248 AG4ZE
 04301143 W4WA 55 EM84>FM08 570 .125 W4TJ
 04301146 K24RK EM90>EM89 1016 50.130 W2BD
 04301252 W4TJ FM08>EM89 363 50.145 W2BD
 04301336 N4VHF 55 EM70>FM08 1044 W4TJ
 04301353 K24RR EM90>EM79 1064 50.125 W8IF
 04301656 AC4TO 1346 50.125 K8LEE
 04301657 K14EME 1346 50.125 K8LEE

United States, W5

04021328 N5SIX EM42>EM60 439 50.265 N5BO
 04021335 N5BO EM60>EM89 1064 50.125 W2BD
 04030412 K5WBX EM41>EL29 442 50.125 KE5DFA
 04061442 W4SUQ EM62>EM60 222 50.125 N5BO
 04082358 K5WBX EM41>EM60 397 50.263 N5BO
 04091326 N5BO MS >EN82 1949 50.126 K8KS
 04110855 K5AB EM01>EL17AX 50.059 W5UWB
 04111422 K5S5 MS >EM13 >EM13 50.060 W00OG
 04160023 N5K5 MS >EM12>EM25 1811 K7FED
 04160039 K5WBX 55 EM60>EM04 50.073 W5RP
 04171421 N5FJ 59 EM32>EM13 50.200 W00OG
 04181435 K5D5RV 56 EM26>EM13 50.125 W00OG
 04181437 N5FJ 59 EM32>EM13 50.125 W00OG
 04181438 K5BZM 32 EM18>EM13 50.125 H W00OG
 04181439 K5HNN 55 EM50>EM13 50.125 W00OG
 04181440 K5AB 59 EM00>EM13 50.0601 W00OG
 04181441 W5RP 529 DM91>EM13 50.073 W5RP
 04231107 K5WBX 55 EM20>FM08 1710 50.260 W4TJ
 04231159 N5BO JT6M 1753 50.260 AG4ZE
 04231337 N5BO 55 EM60>FM08 1151 50.125 W4TJ
 04282356 W5RP 579 TX>OH 1753 50.074 B N4DB

United States, W6

04020413 K6MYC JT65A EME DM07>EL17AX J W5UWB
 04020201 N6NB 59 EL19>DM25 1284 B AD6WL
 04160006 K6FV 529 CM87>DM41 1284 K9RX/7
 04160007 K6GXO BSC DM04>DM43 50.135 W7RV
 04160018 K6GXO 55 EM60>EM04 50.125 H W4GCB
 04160058 K6GXO 59 DM04>EM04 1864 AE5B
 04160106 K6GXO 57 KEITH >EM75 50.125 W8JGG
 04160134 K6GXO DM42>DM25 380 50.125 K7FED
 04160138 K6CQDS DM49>DM12 50.125 N7DB
 04160347 K6GXO 57-9 >EM00 50.125 W4TJ
 04160348 K7BGR 339 CN82>DN30 50.075 B K7TLX
 04160339 N7DB 57 CN85>DN30 50.125 K7TLX
 04160341 W4TA 7 >CN85 50.069 B N6TR/7
 04160346 N17T DM49>CN85 1186 50.125 WORLI/7
 04160349 K7QOS 55 DM49>CN73 1245 N17T
 04160350 K17JA CW >CN87>DN17 50.125 KU7Z
 04160350 K17JA CW >CN87>DN17 50.125 KU7Z
 04160350 W7USB 55 DN17>DM12 50.125 K6GJY
 04160326 W4TA 55 DM33>CN87 1176 50.125 N6KW
 04160326 W4TA 59 DM37>CN87 1378 50.125 B NGK
 04160327 W4TA 59 DM37>CN87 1216 50.125 K6GTCV
 04160348 K7DQL 599 >DM13KT 50.125 K6GTCV
 04160443 N7IGH >CN85BE 50.095 W7EME
 04160444 K7BGR 599 >DN41AF 50.074 B K7JA
 04160447 K7DQL 59 DM06FM>DN1709 1266 AD6W
 04160450 K7DZAL 59 DM26>CN87 1388 N6KW
 04160452 K7DZAL DM26>CN87 1388 .125 W7BA
 04160455 K7DWPJ DM37>CN85 1216 .125 WORLI/7
 04160457 K7JJA CN85>DM37 50.125 K7DWPJ
 04160512 K7RAT CN85>DM03 50.150 K7JA
 04160513 W7CE 1132 50.140 AD6WL
 04160514 NMJD DM37>CN84 1142 50.078 B W7JS
 04160521 W7JS CN84>DM37 50.125 K7DWPJ
 04160522 K7JA DM03>CN87 1592 50.125 N6KW

United States, W8

04030329 W8PAT -28 2860 50.190 J W7GJ
 04062156 W8VU GUD SIG EM88>FM09 125 W1IPL
 04081501 W8BD 57 EM89 1236 50.145 W4TJ
 04090124 N8CJX 57A >EN43 MN 50.125 KOMN
 04091355 K8KS EM82>EM70 1345 50.125 K4RX
 04092128 N8CJX 55A 507 50.126 N3DB

